

Significant Reports

Financial Statement Audit Reports and Review of Information Systems

Establishing and maintaining sound financial management is a top priority for the federal government because agencies need accurate and timely information to make decisions about budget, policy, and operations. Information security is also critically important as unauthorized access to information systems can compromise agencies' abilities to fulfill their missions and protect sensitive information. To evaluate financial management and information security, Congress has enacted the Chief Financial Officer's (CFO) Act and the Federal Information Security Management Act (FISMA) respectively. The CFO Act, as amended, requires agencies to prepare annual financial statements and the agency OIG, or an independent public accounting firm selected by the OIG, to audit these statements. FISMA requires an independent evaluation of agencies' controls over information security.

FY 2006 Independent Auditors Issue Unqualified Opinion; Continue to Cite Need for Improved Post-Award and Contract Oversight

During this reporting period we completed the required CFO audit for fiscal year (FY) 2006. Under a contract with OIG, Clifton Gunderson LLP conducted an audit of NSF's financial statements for FY 2006. The auditors issued an unqualified opinion but repeated both reportable conditions from prior years' audits related to NSF's post-award oversight for high risk grants and contract monitoring.

In FY 2006, NSF expended approximately \$4.9 billion in grants and cooperative agreements and approximately \$550 million on active contracts and interagency agreements. As such, it is important that NSF oversee these grants and contracts to ensure that federal funds are properly spent on allowable costs benefiting NSF's research activities, and that contractors use federal funds consistent with the objectives

HIGHLIGHTS

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of the contracts. In FY 2006, NSF made progress in addressing prior post-award monitoring recommendations by initiating some new procedures, such as hiring a contractor to perform desk reviews of certain high risk awards. However, the auditors reported that additional improvements are still needed, as \$2.7 billion of \$3.2 billion (84%) of high risk awards did not receive a site visit or desk review during FY 2006. Specifically, Clifton Gunderson recommended that NSF: (1) complete the desk review program implemented for high risk awards and evaluate the benefit and effectiveness of such reviews; (2) refine the factors in the risk assessment model used to select high risk awards for desk review or site visits; (3) expand the review coverage to include testing of federal cash transactions for high risk awards that were excluded from other NSF reviews for that fiscal year; and (4) revise standard operating guidance for planning and scheduling reviews for large facilities.

Clifton Gunderson also reported that NSF did not have a comprehensive, risk-based system in place to oversee and monitor its contracts. The auditors recommended that NSF: (1) expand the Contracts Manual to include specific policies and procedures for identifying and managing high risk contracts; (2) continue to perform Quarterly Expenditure Report reviews of its largest contractors and follow up on the findings and recommendations in the OIG cost-incurred reports issued from FY 2000 forward; and (3) maintain an electronic copy of key source documentation used to support the property, plant, and equipment activity and balances in NSF's financial statements.

In January, NSF submitted its proposed action plans to address the recommendation related to these reportable conditions. The proposed corrective actions were reasonable and generally responsive to all but two of the contract monitoring recommendations. The OIG and Clifton Gunderson will continue working with NSF management to ensure that these issues are resolved timely.

Management Letter Also Cites Need for Improved Post Award and Contract Monitoring Practices

The FY 2006 Management Letter identified eight findings, some of which incorporated elements of prior years' findings related to NSF's operations and financial reporting controls.¹ The Management Letter reported continuing weaknesses in NSF's grants and contracts monitoring programs. For example, the auditors found missing or late grantee annual project reports, late final project reports, and incomplete documentation in NSF's monitoring files to evidence the extent and results of its oversight reviews. The auditors recommended that NSF revise its Site Visit Review Guide to provide specific guidance for reviews and for documenting the review steps, results, and clo-

¹ Auditors issue a management letter to separately communicate findings arising from the financial statement audit that are not reported in the audit report but are still important to ensuring a sound overall internal control structure and require management's attention.

sure of recommendations. Further, the auditors found that NSF did not fully document its contract monitoring activities and needs to provide training to all employees responsible for accepting services and/or goods.

The Management Letter repeated three findings, including two findings originally included in the FY 2004 Management Letter on post-retirement liabilities and environmental clean-up costs. The Letter recommended that NSF seek guidance from the Federal Accounting Standards Advisory Board (FASAB) on how to account for post retirement benefits at Federally Funded Research and Development Centers (FFRDCs) that it wholly supports. In one case, neither NSF nor the FFRDC reported this liability on its financial statements. FASAB's guidance is necessary to ensure that the entity responsible for this liability is correctly recognizing, recording, and reporting it. The Letter also reported that NSF needs to clarify its responsibilities for environmental clean-up costs in the Antarctic. Although the treaty that governs NSF's responsibilities in the Antarctic states that NSF has responsibility for remediation of environmental incidents, it does not appear to provide for concomitant liability. To ensure that NSF prepares accurate financial statements, the auditors recommended that NSF seek guidance from FASAB on how to account for clean-up costs for which NSF has an obligation and responsibility, but no apparent legal liability.

NSF management generally concurred with a number of the recommendations in the Management Letter. In some instances NSF is developing alternative approaches to resolve the findings. The FY 2007 financial statement audit will evaluate NSF's actions in response to the findings and recommendations to determine whether it has resolved these issues.

FY 2006 FISMA Report Affirms NSF Security Program but Identifies Needed Improvements

FISMA requires agencies to adopt a risk-based approach to improving computer security that includes annual security program reviews and an independent evaluation by the Inspector General. Under a contract with the OIG, Clifton Gunderson conducted this independent evaluation for FY 2006. Clifton Gunderson reported that NSF has an established information security program and has been proactive in reviewing its internal security controls and identifying areas that should be strengthened. NSF also corrected five of the eight findings reported in the prior year's Independent Evaluation Report. However, the auditors reported three new findings relating to a general support system, disaster recovery, and access controls. These weaknesses pose a considerable risk to NSF and should be addressed promptly. NSF management provided a corrective action plan for the recommendations and Clifton Gunderson will review implementation of these corrective actions as part of its FY 2007 independent evaluation.

Contract Audits

Polar Support Contractor Continues to Have Compliance Problems

Beginning with our September 2004 Semiannual Report,² we have reported on a number of audits of NSF's largest contractor, Raytheon Polar Services Company (RPSC). These audits questioned about \$55.5 million of claimed costs and cited RPSC's parent, Raytheon Technical Services Company (Raytheon) for failing to comply with its federally disclosed accounting practices, subsequently removing RPSC from Raytheon's disclosure statement. These audits also identified a number of internal control deficiencies in RPSC's method for identifying indirect vs. direct costs, its New Zealand operations, and its billing, financial, project, and subcontract management systems. This semiannual period we reported that if RPSC is allowed to continue its practice of charging indirect costs as direct costs, contrary to its certified accounting practices in the NSF contract, NSF could incur an additional \$26.6 million of costs for the remaining contract period 2005 through 2010.

We also previously reported that RPSC needs to improve its subaward monitoring and assess the risks that its subcontractors can accurately record and bill its subcontract costs. In this period two audits of an RPSC subcontractor, Agencias Universales S. A. (AGUNSA), were completed. The auditors found significant internal control deficiencies, which enabled AGUNSA employees to embezzle \$157,000, including \$7,200 related to the RPSC contract. If not corrected, these deficiencies could adversely affect AGUNSA's ability to effectively administer its ongoing financial activities under the RPSC subcontract.

RPSC's Proposed Disclosure Statement Revision Drives Estimated Costs Requiring Resolution to \$82.6 Million

RPSC spends approximately \$110 million annually to provide science, operations and maintenance support to sustain year-round research in NSF's United States Antarctic Program (USAP). Raytheon is required to file a Cost Accounting Standards Board (CASB) disclosure statement with the Department of Defense (DoD) to inform the government how it will bill its direct and indirect costs so that its indirect costs (i.e., overhead management costs) are charged to its government contracts on a consistent and equitable basis. Of the \$55.5 million of previously questioned costs, about \$36.2 million, or 65 percent, were due to the contractor's failure to follow its written disclosure statement, resulting in RPSC exceeding its contractual indirect cost ceilings.

² September 2004 Semiannual Report, pp. 15-16.

During this semiannual period, DoD, which is responsible for overseeing Raytheon's compliance with its disclosure statement, made an initial finding of noncompliance with Raytheon's disclosed accounting practices for fiscal years 2003 and 2004. This followed a final determination of noncompliance that DoD made last year citing Raytheon with not adhering to its disclosed accounting practices for fiscal years 2000 to 2002.

In April 2006 Raytheon proposed to correct this noncompliance for the remaining five years of the contract by submitting a unique CASB disclosure statement for its Polar Services business unit retroactive to January 1 2005. Raytheon's proposed change in its disclosed accounting practices was to classify and bill indirect management costs for its Centennial, Colorado office as direct costs. Also, the Defense Contract Audit Agency's (DCAA) audit of the revised CASB disclosure statement identified nine deficiencies and concluded that the disclosure statement was not acceptable because it did not adequately describe RPSC's cost accounting practices used on the NSF contract. The auditors recommended that RPSC submit a revised disclosure statement that corrects each deficiency. RPSC just submitted its revised disclosure statement in February 2007.

Further, RPSC did not submit a cost impact analysis to explain the financial impact of its proposed change in disclosed accounting practices on the remaining five years of the NSF contract. This prompted the OIG to request a cost impact analysis from DCAA, which was completed during this reporting period. The DCAA auditors projected that, if accepted by NSF, the proposed changes in the revised disclosure statement would increase costs charged to NSF by an additional \$26.6 million over the five years 2005 to 2010. This amount would, in turn, raise RPSC's total questioned and estimated increased costs to \$82.6 million.³

We recommended that, for the 2000 through 2004 contract period, NSF coordinate with DoD to resolve the disclosed accounting practice deficiencies and the questioned \$36.2 million of indirect costs. We also recommended that NSF resolve the remaining \$19.8 million in questioned costs, including \$12.2 million of costs claimed in excess of contractual indirect cost ceilings and \$7.6 million of improperly claimed other direct costs and fringe benefits. For the 2005 through 2010 contract period, we recommended that NSF also work with DoD to assess the desirability of RPSC's proposed change in disclosed accounting practices in light of the \$26.6 million of increased contract costs.

To address these recommendations and those in the nine prior audit reports on this contract over the past two and one-half years, NSF has drafted a corrective action plan, which we are currently reviewing and discussing with the agency.

³ The \$82.6 million includes not only the \$26.6 million but also \$560,376 of RPSC fringe benefit costs questioned in DCAA audits this semiannual period.

Funds Embezzled at Polar Subcontractor

AGUNSA, as an RPSC subcontractor, provides ship chandlery duties and technical support in Punta Arenas, Chile for the US Antarctic Program. From January 1, 2002 through June 30, 2003, two AGUNSA employees embezzled approximately \$157,000 of company funds, including approximately \$7,200 related to AGUNSA's subcontract with RPSC. Although AGUNSA reimbursed its vendors when the embezzlement was discovered, as much as \$616,000 of NSF funds that RPSC paid to AGUNSA may have been delayed during the course of the embezzlement scheme.

At NSF's request, we reviewed the circumstances of the embezzlement and the adequacy of AGUNSA's internal controls to properly accumulate, track, and monitor its costs and billings under the RPSC subcontract in compliance with federal and NSF requirements. The auditors found that AGUNSA lacked adequate management oversight and internal control over the accounting and vendor payment processes, which enabled two individuals in the Punta Arenas Office to divert funds intended to pay vendors. These same individuals also had access to the accounting records in which they falsely recorded payments to vendors that had not been made. The embezzlement was discovered when vendors complained about late payments of their invoices.

The auditors recommended that NSF direct RPSC to ensure that AGUNSA improves its overall internal control and management structure over its invoice and payment process. This includes ensuring that AGUNSA's employees clearly understand their responsibilities to oversee and monitor its vendors and to ensure that vendor invoices are properly prepared, authorized, and documented prior to submission of costs to RPSC for reimbursement.

In general, AGUNSA agreed with the findings and corrective actions in our report. The report has been submitted to NSF's Division of Acquisition and Cooperative Support for audit resolution.

Audits of NSF Support Contactors

Question \$634,543 in Costs

In further support of NSF's request for audits to assist in its contract oversight responsibilities, the OIG contracted with DCAA to perform audits of contracts with Triumph Technologies, Inc., Compuware Corporation, Temple University, and Mathematica Policy Research, Inc., whose total claimed costs amounted to \$41 million. Three of the audits questioned \$634,543 of about \$34 million of claimed costs, and on the fourth audit, over four years we identified minor adjustments to the indirect cost pools and the G&A bases. To prevent future cost overruns we recommended that NSF improve its processes for reviewing contractor invoices and ensure that its contract files are complete and accurate. More information on each audit is presented (next page) :

Triumph Technologies. Auditors found that Triumph (NSF's Small Business Innovative Research/Small Technology Transfer Research contractor) failed to comply with the indirect rate ceilings in its NSF contract, claiming costs in excess of contractual indirect ceiling limitations for each of the three years audited, resulting in \$79,548 of questioned costs. Triumph also did not provide documentation to support \$1,192 of its claimed subaward costs. As a result, auditors questioned a total of \$80,740 out of the \$1.7 million of costs that Triumph claimed.

Compuware Corporation. Compuware, in two of its contracts to provide information technology support services for NSF over four years, incorrectly included some direct costs in the overhead pool and claimed unallowable costs that were incurred for gifts, contributions, parties and picnics. These errors resulted in \$320,418 of questioned costs out of \$28 million in costs claimed.

Temple University. An audit of \$4.8 million in claimed costs on a contract with Temple for technical evaluation support for NSF's Division of Research, Evaluation and Communication, identified \$233,385 in questioned costs: \$231,838 for award costs claimed in excess of the authorized contract ceiling, and \$1,547 for unallowable alcoholic beverages. NSF exercised a unilateral modification to increase the award by \$175,000 but failed to sign the award document or provide it to Temple. Accordingly, while an additional \$175,000 of costs may now be allowable, the increase in award funds is insufficient to cover Temple's total claimed costs.

Mathematica Policy Research (MPR). Out of \$6.5 million claimed on three contracts awarded to MPR for data and research services in support of NSF's Division of Science Resources Statistics over four years, the auditors found \$83,226 of unallowable and/or misclassified costs in its overhead and G&A expense pools and added \$39,795 to MPR'S G&A base because of misallocated costs.

Overall, we recommended that NSF establish an internal screening process to review contractors' invoices to ensure that ceiling amounts for indirect costs are not exceeded and that all contract modifications are appropriately signed and provided to the contractor. We also recommended that NSF resolve the questioned costs, indirect cost rates, and penalties based on the results of the audits, and require the contractors to strengthen their internal controls to prevent similar problems from recurring in the future. Each of these reports has been provided to NSF's Division of Acquisition and Cooperative Support to ensure that the contractors' corrective actions adequately address the report's recommendations.

Grant Audits

Voluntary Faculty Effort Pledged to Sponsored Projects Goes Unrecorded

As previously reported in a prior Semiannual Report,⁴ the OIG has undertaken an initiative to assess the adequacy of accounting and reporting processes for labor costs at a representative sample of NSF's top-funded institutions. During this reporting period, we audited the accounting records related to labor effort at the California Institute of Technology (Caltech) in Pasadena, California. We found that Caltech generally supported salary costs to NSF but needs to develop a system to provide accurate reporting of voluntary committed cost sharing by faculty members.

Our review of 32 sampled employees indicated that Caltech's labor effort reporting system provided support for most of the \$1.6 million of FY 2005 salaries charged directly to NSF grants. But three of the five faculty members who had explicitly pledged in their grant proposals that they would voluntarily contribute 1 to 20 percent of their labor time on five federal awards did not report any of this time in their labor effort reports. A January 2001 OMB clarification memorandum⁵ required awardees to track and account for faculty research effort voluntarily committed as cost sharing in their labor effort reporting systems. The Memorandum defined voluntary committed labor effort as cost sharing of salary costs that Principal Investigators (PIs) specifically pledge willingly at the university's expense and is in addition to any mandatory cost sharing required by the agency under the award agreement.

Accurate reporting of voluntary committed labor effort is necessary to enable the federal government to assess whether the PIs at Caltech actually devoted the level of effort promised in their grant proposals. In our sample, the unreported faculty effort was valued at approximately \$100,000 or about 20 percent of the annual compensation received by the three PIs. In addition, the salary costs associated with unreported faculty effort do not get properly included in Caltech's organized research base, thereby resulting in greater Caltech indirect costs paid by the federal government. Since Caltech has 286 faculty members who may also have omitted reporting their voluntary labor, the monetary impact is potentially significant.

In addition, Caltech needs to improve the timeliness of its labor effort distribution and certification process. In FY 2005, Caltech circulated 63 labor reports for the 32 sampled employees an average of 12.5 days after the required 120-day timeframe. We also found that PIs certified 25 percent of the reports from 1 to 47 days after the 30-day required turnaround time. Without timely certification NSF has less assurance that the certifications are reliable

⁴ September 2005 Semiannual Report, p. 20.

⁵ OMB Memorandum M-01-06, Clarification of OMB A-21 Treatment of Voluntary Uncommitted Cost Sharing and Tuition Reimbursement (January 5, 2001).

because PIs must remember as far back as 11 months to confirm employee activity on sponsored projects.

The weaknesses in Caltech's labor effort reporting occurred because the university has not established clear guidance and procedures to ensure that PI effort voluntarily pledged as cost sharing in federal grant proposals is properly identified and tracked in the labor report reporting system. Therefore, we recommended that Caltech develop and implement procedures that will more accurately report voluntarily contributed faculty labor effort on sponsored projects, and ensure timely certification of labor effort reports. In general, Caltech agreed with the audit findings and recommendations but stated that it already had adequate management processes in place to address the issue of timely effort reports. We forwarded the report to NSF's Division of Institution and Award Support to work with Caltech's cognizant agency to ensure that the University takes adequate corrective action to address the report's findings and recommendations.

Non-Profit Lacks Support for \$2.47 Million in Costs

An audit of The American Institute of Mathematics (AIM), a non-profit organization engaged in expanding mathematical knowledge, found inadequate internal controls over NSF grant funds. For seven NSF grants with cumulative funding of \$6.1 million as of December 31, 2005, AIM did not provide adequate documentation to support \$1.57 million of employee salaries (\$1,184,367 of NSF direct costs and \$389,900 of claimed cost sharing), \$882,054 of NSF funds passed-through to subawardees and independent contractors, and \$23,531 of travel, participant support, and indirect costs. In addition, AIM charged almost all of its indirect costs and cost sharing to one NSF award, had inadequate financial oversight of its subrecipients and independent contractors, and lacked a financial accounting system that could ensure accurate, current, and complete disclosure of the financial results of its NSF awards. The grantee is unique in that NSF is its only federal sponsor and that most of the award personnel are not employees of AIM.

The internal control weaknesses and the significant amount of undocumented costs occurred because AIM was not familiar with federal grant requirements and lacked written policies and procedures to ensure compliance. We recommended that AIM establish written policies and procedures and provide staff training. AIM agreed with most of the recommendations and we have forwarded the audit report to NSF's Division of Institution and Award Support to resolve costs and ensure corrective action.

Community College Failure to Follow Own Internal Control Procedures Results in \$185,213 of Questioned Costs

In this semiannual period, we completed the last of a series of audits of NSF awards to community colleges. This audit of three awards amounting to \$2.7

million to Nashville State Technical Community College, (NSTCC), found that the college did not always adhere to its established policies and procedures to account for NSF funds.

NSTCC was not always able to provide adequate documentation for costs charged to its NSF awards. Routine accounting documents such as purchase orders, invoices, contracts, and sign-in sheets were not available to support \$37,193 of participant support, consultant costs, travel costs and other direct costs. NSTCC also overcharged one award \$148,020 for indirect costs because it claimed the budgeted amount of indirect costs instead of applying the NSF approved indirect cost rate to actual salaries and wages. The audit also found that for one ongoing award NSTCC could not provide adequate support for \$85,446 or 35% of the \$241,528 it had claimed to NSF as cost sharing. In total the auditors questioned \$185,213 in costs submitted.

In addition, NSTCC did not obtain required certifications and personnel activity reports to support \$556,016 of salaries, wages, and fringe benefits, or approximately 21 percent of \$2.7 million in total costs claimed. The auditors were ultimately able to satisfy themselves of the propriety of the labor costs that NSTCC charged to its NSF awards by performing additional audit procedures. However, NSTCC needs to significantly improve its controls over labor effort reporting to prevent such problems on future awards.

The auditors recommended that NSF direct NSTCC to implement procedures to verify that all employees working on NSF awards are: 1) completing the required personnel activity reports and obtaining proper review and certification of the reports; 2) trained on NSTCC procedures to review, approve, and maintain all documentation to support direct and cost sharing costs charged to future NSF awards; and 3) claiming indirect costs based on the terms of the NSF award agreements.

NSTCC generally agreed with the audit recommendations and indicated that it has initiated corrective action. However, NSTCC disagreed that it lacked appropriate documentation for certain costs charged to its NSF awards and that it did not have adequate documentation to support its cost share. To follow up on our findings and recommendations, we have forwarded the audit report to NSF's Division of Institution and Award Support.

University Needs to Improve Internal Controls Over Sub-award Management

An audit of two NSF awards to the University of Puerto Rico – Central Administration (UPR) with \$8.8 million of claimed NSF funds found significant deficiencies in the University's subaward-monitoring system. Similar findings were also reported in UPR's Fiscal Year 2003 A-133 Single Audit Report.

UPR did not adequately monitor subaward costs or subawardee cost sharing for one award that included seven subawards amounting to \$3.1 million or 58 percent of the total costs charged to the NSF award. The auditors had to perform additional audit steps at further expense to verify that all but \$8,530 of claimed subaward costs were allowable. UPR needs to strengthen its internal controls over subaward monitoring to ensure that future subaward costs claimed are allowable and allocable to NSF awards.

To address internal control weakness, we recommended that UPR develop and implement written policies and procedures to assess and document each subawardee's risk of claiming unallocable or unallowable costs and cost sharing contributions and perform periodic risk-based monitoring reviews of subawardee costs. UPR generally agreed with the recommendations and we have forwarded the report to NSF's Division of Institution and Award Support to resolve the findings.

Material Weaknesses Found in School District's Internal Controls Over NSF Funds

As part of our ongoing review of awardees under NSF's Urban Systemic Initiatives/(USI) Urban Systemic Program (USP),⁶ we audited \$26.5 million in costs and \$6 million in cost sharing claimed by the Dallas Independent School District (DISD) on two awards. The audit identified seven weaknesses in the District's internal controls over financial reporting including three material weaknesses: DISD did not have adequate systems to retain and retrieve records, track and report the receipt and expenditure of cost sharing, and account for participant support costs.

Furthermore, DISD destroyed records for the first three years of one of the two awards audited in violation of NSF requirements that records should be maintained for three years following the submission of a final project report, and could not locate 22 out of 232 transactions tested for both awards. The auditors performed additional audit procedures at government expense and ultimately questioned only \$91,216 of the costs claimed.

DISD did not adequately identify track, and monitor \$9.9 million of participant support costs, out of the \$26.5 million of total costs claimed on both awards. The auditors again found it necessary to perform alternative tests, and questioned \$33,602 of participant support costs. They also found that, participant support tuition reimbursement checks were returned to the same person who initiated them, thus creating the opportunity for errors or irregularities to occur without being detected. The remaining questioned costs totaling \$57,614 were for unsupported consultant, materials, supplies, travel, and miscellaneous expenses.

⁶ March 2006 Semiannual Report, pp. 16-17.

DISD was also required to provide \$98.9 million of cost sharing on one award, but did not have policies and procedures in place to accumulate and monitor its actual cost sharing contribution and ensure that required levels were met, even though its accounting system was capable of properly accounting for cost share. The auditors did not question any of the \$50 million cost sharing shortfall because, after the completion of fieldwork, at DISD's request, NSF reduced the required amount of cost sharing to \$3 million. The auditors verified that DISD had adequate support for the revised amount of required cost sharing.

The auditors recommended that the NSF direct DISD to develop and implement a financial management system with policies to effectively administer and monitor NSF funds, and ensure that DISD (1) maintains documentation supporting all award costs; (2) implements accounting processes to separately identify, track, and report on participant support costs and cost sharing; and (3) segregates check disbursement duties. DISD generally agreed with the report recommendations, and we forwarded the report to NSF's Division of Institution and Award Support to resolve the questioned costs and ensure that corrective actions are responsive to the audit recommendations. We also suggested that NSF flag DISD in its award system until NSF is able to resolve the findings and recommendations and defer closure of the audit recommendations until an adequate corrective action plan has been implemented.

Performance Audits

National Science Board's Compliance with Sunshine Act Improves

During 2006, the National Science Board continued to demonstrate a clear intent to comply with the requirements of the Government in the Sunshine Act. The Board greatly improved its procedural compliance in 2006, having implemented a new process for tracking due dates for publicly announcing meetings. However, the Board could further improve its compliance with the Act by ensuring that it votes on and announces all changes to publicly announced agendas, and by instructing court reporters to fully record all closed meetings.

In addition, the Board generally closed meetings only when warranted, consistent with the Act's exemptions. However, in several closed meetings, the Board, and particularly the Executive Committee, continued to include agenda items that should have been included in open sessions. This occurred because the decision to include agenda items in open or closed sessions is made in advance of the actual meeting. There was insufficient evidence to determine whether the Board properly applied the Sunshine Act's prospective standard of being likely to reveal information covered by one of the Act's

exemptions when deciding upon closed meeting agenda items. Based on these findings, we again recommended that the Board develop, implement, and provide training on a process for documenting the reason for placing each agenda item in a closed rather than an open meeting. The Board generally agreed with our recommendations.

Audit Resolution

NSF Takes Steps to Improve Indirect Cost Procedures and Awardee Accountability Over Grant Funds

NSF has agreed to adopt recommendations contained in two prior audit reports in which OIG advised the agency to revise its indirect cost recovery policy to conform to federal requirements and continue to improve its policies for reviewing and negotiating indirect cost rates. Since indirect costs comprise about 20 percent of NSF's award costs, it is important that NSF ensure that awardee institutions correctly apply the indirect cost rate and that it has accurate and reliable information when it negotiates indirect cost rates with its awardees. In two additional audit resolutions completed this period, NSF has taken steps to ensure that Howard University and New Mexico Highlands University have improved their internal controls, including their management of subawards and cost sharing, on NSF awards to ensure compliance with federal and NSF requirements.

NSF Revises its Indirect Cost Recovery Procedures for Universities

NSF is revising its Grant Policy Manual provisions for indirect cost recovery to conform with federal requirements. A prior audit disclosed that contrary to the federal requirements, NSF had allowed universities and colleges to recover indirect costs utilizing rates negotiated after initial awards were granted.⁷ As a result, the audit found that 3 of the 23 universities reviewed had used newly negotiated indirect cost rates that resulted in \$1.9 million of NSF grant funding being inappropriately shifted from direct research to administrative and facility support over a nine-year period. NSF's revised policy will require universities and colleges to use the indirect cost rates in effect at the time awards are made throughout the life of the awards in order to preserve the level of NSF funding awarded for research. It has incorporated the change into the draft version of its new Award Administration Guide, which is currently being reviewed by various NSF offices and is expected to be issued in May 2007. The OIG and NSF are working together to reach agreement on whether the \$1.9 million is properly reported as funds that could be more efficiently used for accomplishing NSF's mission.

⁷ September 2006, Semiannual Report, pp. 16-17.

Guidance for Reviewing Indirect Cost Rate Proposals Under Development

A recent audit found that NSF could improve its processes for reviewing indirect cost proposals from awardees for which it negotiates indirect cost rates. In response, NSF agreed to revise its standard operating guidance for indirect cost proposal review. It stated that its new guidance will include policies and procedures for a risk-based program that requires the updated assessments of awardees' financial management systems, maintenance of historical files on awardees' prior rate negotiations, guidance for staff to facilitate the review of submitted proposals, and more effective tracking of the receipt of proposal and follow up for untimely proposals. NSF has incorporated this change in agency policy into the Proposal & Award Policies & Procedures Guide issued on April 12, 2007 effective June 1, 2007. OIG is reviewing the new guidance to ensure that it adequately addresses the findings and recommendations in the audit report.

NSF to Validate University's Corrective Actions

As a result of an OIG audit report, NSF has scheduled an onsite visit to Howard University in late April 2007, to verify that the proposed corrective actions are being implemented by the awardee organization. NSF has also required Howard to provide the results of the two independent verifications that it promised to validate timely and appropriate corrective actions were taken to implement the OIG audit report recommendations.

The OIG audit found that Howard had significant internal control weaknesses over cost sharing, funds passed-through to subawardees, faculty salaries, and student stipends. The auditors were not able to determine whether the University actually provided \$12.3 million of claimed cost sharing due to insufficient documentation and the commingling of funds. Also, Howard lacked comprehensive subaward agreements legally obligating its subrecipients to provide \$5.4 million of cost sharing and to restrict \$2.3 million of funding to participant support and/or trainee costs.

In response to the audit recommendations, the University has implemented corrective actions to improve its federal grants management. It issued a new manual establishing policies and procedures for managing and monitoring federal grants and has undertaken a major reorganization of the University's research enterprise. Howard appointed a new cabinet-level Vice-President for Research and Compliance and engaged a consultant to assist in establishing an appropriate structure for managing the research enterprise, including the establishment of effective and efficient internal controls.

⁸ September 2006, Semiannual Report, pp. 16-17.

Inadequate Internal Controls Result in Repayment of \$131,554 of Grant Funds

An audit of \$3 million awarded to New Mexico Highlands University (NMHU) completed in September 2006 found that NMHU had inadequate internal controls over cost sharing, subawardee monitoring, expenditure reporting, and conflicts of interest statements.⁸ The auditors questioned \$165,472 of NMHU's claimed costs. In response to the audit, NMHU stated it will implement an accounting system grant module to track cost sharing and indicated its grant accounting office is now verifying cost sharing and in-kind contributions claimed on federal awards. Further, NMHU stated that it has taken steps to improve its subawardee monitoring. During audit resolution, NSF reviewed documentation submitted by the University in support of its proposed corrective actions and sustained \$131,554 of the questioned costs.

Work in Progress

Audit of NSF's Oversight of Center Programs

We recently began an assessment of NSF's management and oversight practices related to its eight Center programs. Each center focuses on a different scientific challenge: from engineering research to the "science of learning" to nanoscale science and engineering. Though diverse in subject matter, all are designed to exploit research opportunities that are sufficiently complex and potentially rewarding to justify bringing together facilities, equipment, researchers, and students to a single academic setting. In FY 2006, NSF provided over \$250 million, representing approximately 5 percent of NSF's budget, to 92 individual research Centers. Given NSF's significant investment in using the Centers to advance the frontiers of research and education in science and engineering, we will be examining how NSF oversees and manages these Centers to identify best practices and opportunities for improvement.

Sufficiency of NSF's Cooperative Agreements for Large Facility Projects

OIG has initiated an audit to determine whether the terms and conditions included in NSF's cooperative agreements for the management and operation of its large facilities projects are sufficient for NSF to provide stewardship over its programs and assets. We will be reviewing a sample of cooperative agreements and analyzing their specific terms and conditions in light of each facility's unique characteristics and risks.



"Brain Camp" is a summer program in which children learn about the brain through fun activities. It is sponsored by the Atlanta Center for Behavioral Neuroscience (CBN), an NSF Science and Technology Center.

Credit: CBN

A-133 Audit Reports

OMB Circular A-133 provides audit requirements for state and local governments, colleges and universities, and non-profit organizations receiving federal awards. Under this Circular, covered entities that expend \$500,000 or more a year in federal awards are required to obtain an annual organization-wide audit that includes the entity's financial statements and compliance with federal award requirements. Non-federal auditors, such as public accounting firms and state auditors, conduct these audits. The OIG reviews these reports for findings and questioned costs related to NSF awards, and to ensure that the reports comply with the requirements of OMB Circular A-133.

During this reporting period, the A-133 audits of NSF grantees found compliance deficiencies and internal control weaknesses resulting in \$2.3 million of questioned costs related to NSF awards. The findings contained in A-133 reports help to identify potential risks to NSF awards and are useful to both the Foundation and OIG in planning site visits, post-award monitoring, and future audits. Because of the importance of A-133 reports in monitoring awardees, the OIG returns reports that are deemed inadequate to the awardees to work with the audit firms to take corrective action.

Findings Related to NSF Awards

| Category of Finding | Type of Finding | | | |
|--------------------------------|-----------------|-------------------|-----------|------------|
| | Compliance | Internal Controls | Monetary | Total |
| Financial and Award Management | 49 | 46 | | 95 |
| Salary/Wages | 16 | 9 | 7 | 32 |
| Procurement System | 17 | 4 | 1 | 22 |
| Subawards | 14 | 5 | 2 | 21 |
| Equipment | 8 | 3 | | 11 |
| Indirect Costs | 7 | 1 | 1 | 9 |
| Property Management System | 5 | 1 | | 6 |
| Travel | 7 | 1 | | 8 |
| Other | 5 | 2 | | 7 |
| Cost-Sharing | 2 | 3 | 1 | 6 |
| General Areas | 3 | | | 3 |
| Other Direct Costs | 5 | | | 5 |
| Consultant Services | 3 | | | 3 |
| Interest Earned | 2 | | | 2 |
| Participant Support Costs | | | 1 | 1 |
| TOTAL | 143 | 75 | 13 | 231 |

In this reporting period, we reviewed 138 audit reports, covering NSF expenditures of more than \$5.6 billion from fiscal year 2003 through 2006. Among these reports, the auditors issued three qualified, adverse or disclaimer of opinions on the financial statements and 24 qualified, adverse or disclaimer of opinions on the entity's compliance with federal award requirements. The reports revealed 143 instances where awardees failed to comply with federal requirements and 75 instances where weaknesses in awardees' internal controls could lead to future violations. The auditors also identified 13 instances of non-compliance with federal requirements that caused them to question a total of \$2.3 million of the costs claimed by recipients of NSF awards. As detailed in the table on page 26, the most common violations were related to financial and award management deficiencies and documentation supporting claimed salary/wages costs.

We also examined 80 management letters accompanying the A-133 audit reports. Auditors use these letters to report internal control deficiencies that are not significant enough to include in the audit report, but which could become more serious over time if not addressed. The letters we examined disclosed a total of 79 deficiencies that could affect NSF awards in areas such as segregation of duties to prevent potential fraud and policies and procedures related to financial and award management.

Findings Related to Timeliness and Quality

For 38 of the 138 audit reports we reviewed in which NSF was the cognizant or oversight agency, we found that 15 reports (39 percent) were submitted late or the audit reporting package was incomplete. OMB Circular A-133 requires audits to be completed and reports submitted within the earlier of 30 days after receipt of the auditors' report(s), or nine months after the end of the audit period, unless a longer period is agreed to in advance by the cognizant or oversight agency for audit. In each case, we informed the auditee that the late submission of a complete reporting package could affect the organization's risk profile and suggested that all future A-133 audits be performed and submitted in a timely matter.

The A-133 reports we reviewed also revealed problems with audit quality. Auditors are required to follow OMB Circular A-133 guidelines regarding the presentation of the audit findings. However, we found that 12 reports (32 percent) did not present the findings in sufficient detail. OMB Circular A-133 also provides guidance to the auditee on the preparation of a Corrective Action Plan. We found that 13 reports (34 percent) either did not include a Corrective Action Plan or the plan was incomplete. The OIG identified each of the potential errors and contacted the auditors and awardees, as appropriate, for explanations. In each case, the auditors and awardees either provided adequate explanations or additional information to demonstrate compliance with the Circular, or the error did not affect the results of the audit. While some of the errors were clearly immaterial, the auditors and awardees

generally acknowledged that the errors reduced the reliability of the reports. In each case, we issued a letter to the awardee to inform them of the results of our review and to identify issues on which they should work with the auditors during future audits to improve the quality and reliability of the report.